REMARKS/ARGUMENTS

This application has been carefully considered in light of the Non-Final Office Action mailed January 11, 2007. Responsively, claims 1, 2, 4-6, and 11-15 have been amended and claims 1-15 remain in the application. No new matter has been added.

Claim 12 has been rejected under 32 U.S.C. 112, second paragraph as being indefinite. In this respect, the claim has been amended to remove the indefiniteness and, therefore, reconsideration of this grounds for rejection is respectfully requested.

In the office action the Examiner has rejected claims 1-9, 13 and 15 under 35 U.S.C. 103(a) as being obvious and therefore unpatentable over US Patent 6,584,202 to Montag et al in view of the teachings of US Patent 6,104 825 to Thigpen. Claims 10-12 and 14 have been rejected for being obvious and therefore unpatentable over the US Patents to Montag et al and Thigpen when further considered in light of the teachings of US Published Application 20030021433 to Lee. Claims 1-15 have been rejected under 35 U.S.C. 103(a) as being obvious and therefor unpatentable

over US Patent 4,819,269 to Klayman when considered in light of the teachings of the reference to Thigpen.

The references to Montag et al and Klayman have been considered but are not believed to provided sufficient nexus to the claim invention to support rejections under 35 U.S.C. 103(a) in combination with the teachings of the reference to Thigpen. The Examiner has assumed that it would be obvious to substitute the planar magnetic transducers disclosed in Thigpen for the speakers described in with the reference to Montag et al or Klayman. Applicant respectfully disagrees that such a substitution would be obvious because the entire operational and control parameters of the two primary references would have to be disregarded in order to make such a substitution. Both Montag et al and Klayman are directed to systems using conventional cone type transducers that project wide and uniform acoustic dispersions that effectively prevent an acoustic signal from one transducer to be aimed to direct sound to one ear of a listener while a second transducer is used to direct sound to the opposite ear of the listener, as is the case with the present invention.

The systems of Montag et al and Klayman are directed to using signal manipulation including phase, time delays and summing of different signals and amplitude adjustments to control

channel separation at each of a listeners ears. The methods and systems they describe depend on and require overlapping and intersecting of audio information from multiple speakers or transducers. Their systems require blocking out or filtering signals from one transducer that may interfere or offend with signals with another transducer. Thus, each transducer is receiving different signals with varying delays and amplitudes in an effort to reduce interference.

Further, as discussed at page 12, paragraph 0031 of the present application, because conventional transducers exhibit wide dispersion patterns of sound waves, they do not project good quality acoustic images off of surfaces such as windshields or the like. To overcome this problem, both of the primary references have developed electronic controls for issuing acoustics from each speaker or transducer without the placement of the transducers being critical. With the present invention, the placement of the planar magnetic transducers in pairs to direct sound toward the opposite ears of a listener is critical to the proper operation of the sound system. Compare this with the array shown in Montag et al wherein three transducers are mounted across the dashboard so that only with electronic altering of the signals to the three transducers can a simmulated stereo-like sound environment be created.

The system of the present invention takes advantage of the directional characteristics of planar magnetic transducers such that if the transducers are used in pairs and appropriately aligned with one another and the listening position, narrow acoustic signals are effectively directed from the one transducer to a first ear of a listener while the second transducer transmits to a second ear. This pairing and alignment does away with the necessity to perform signal manipulation as is required and is the innovative basis of both the references to Montag et al and Klayman. Further, due to the more directed characteristics of sound from planar magnetic transducers, the sound signals therefrom may be reflected off a surface toward an ear of a listener without loss of signal clarity.

Although the Examiner has suggested that the primary references teach mounting planar magnetic transducers such that their elongated central axes are generally aligned with one another and substantially parallel to a listening position, such a teaching or showing for planar magnetic transducers is not disclosed in the references. It is respectfully submitted that such orientation is a further inventive feature of the present invention that is not obvious in view of the art.

The reference to Lee has been considered, however, even if

one were to combine the teachings of Lee with Klayman, the combination would not overcome the reasons set forth above as to why it is not obvious to simply substitute a planar magnet transducer as described in the Thigpen patent with the reference to Montag et al.

The other art noted by the Examiner but not applied against the claims of the present application has been considered but is not believed to teach or make obvious the invention as is currently claimed.

In view of the foregoing, not only are the structures of the cited references to Montag et al and Klayman different than that of the present invention, as is claimed, but the structures can not be used to practice the end results of the present invention. Thus, there is no obvious anticipation of the present invention. Therefore, reconsideration of the rejections under 35 U.S.C. 103(a) is respectfully requested and favorable consideration and allowance of claims 1-15 is solicited.

Should the Examiner have any questions regarding this response or the allowability of the claims, it would be appreciated that the Examiner contact the undersigned attorney to further expedite the further prosecution of this application and

to schedule a personal interview before taking any action that may be considered as final.

As this response is being filed three months after the shortened statutory period, a separate request for a three month extension of time until July 11, 2007 and a check in payment of the extension fees of $510.00 are submitted herewith.

Respectfully Submitted,

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